ARTICLE 1 DEFINITIONS AND REQUIREMENTS

SECTION 1.0 SCOPE - The regulations in this article shall apply to the administrative procedures necessary to implement the seismic retrofit requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983.

SECTION 1.1 APPLICATION - The regulations shall apply to all general acute care hospital facilities as defined in Section 1.2 of these regulations.

SECTION 1.2 DEFINITIONS - Unless otherwise stated, the words and phrases defined in this section shall have the meaning stated therein throughout Chapter 6, Part 1, Title 24.

Alternate Analysis means a complete seismic analysis using methodology approved in advance by the Office and meeting the criteria of Article 2, Section 2.7 of these regulations.

Bulk Medical Gas System means an assembly of fixed equipment such as storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds, and interconnecting piping that has a capacity of more than 20,000 cubic feet (NTP) of cryogenic medical gas.

Communications System means the assembly of equipment such as telephone switchgear, computers, batteries, radios, microwave communications systems, towers, and antennas that provide essential internal and external communication links.

Conforming Building means a building originally constructed in compliance with the requirements of the 1973 or subsequent edition of the California Building Code.

Critical Care Area means those special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, emergency rooms, operating rooms, post-operative recovery rooms and similar areas in which patients are intended to be subjected to invasive procedures and connected to line-operated, electromedical devices.

Emergency Power Supply (EPS) means the source of electric power including all related electrical and mechanical components of the proper size or capacity, or both, required for the generation of the required electrical power at the EPS output terminals. For rotary energy converters, components of an EPS include the prime mover, cooling system, generator, excitation system, starting system, control system, fuel system, and lube system (if required).

Essential Electrical Systems means a system as defined in the California Electrical Code, Article 517 "Health Care Facilities", Chapter 5, Part 3 of Title 24.

Fire Alarm System means a system or portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal initiating devices and to initiate appropriate response to those signals.

Functional Contiguous Grouping means a group of hospital buildings, each of which contains the primary source of one or more basic services, that are operationally interconnected in a manner acceptable to the Department of Health Services.

General Acute Care Hospital as used in Chapter 6, Part 1 means a hospital building as defined in Section 129725 of the Health and Safety Code and that is also licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, but does not include these buildings if the beds licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, as of January 1, 1995, comprise 10 percent or less of the total licensed beds of the total physical plant, and does not include facilities owned or operated, or both, by the Department of Corrections. It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing or acute psychiatric services only.

Hospital Equipment means equipment permanently attached to the building utility services such as surgical, morgue, and recovery room fixtures, radiology equipment, medical gas containers, food service fixtures, essential laboratory equipment, TV supports, etc.

Hybrid Structure means a structure consisting of an original and one or more additions, constructed at different times, and with lateral force resisting systems of different types, or constructed with differing materials or a different design approach. The original building and additions are interconnected and not seismically isolated.

Nonconforming Building means any building that is not a conforming building.

Nonstructural Performance Category (NPC) means a measure of the probable seismic performance of building contents and nonstructural systems critical to providing basic services to inpatients and the public following an earthquake, as defined in Article 11, Table 11.1 of these regulations.

Primary Source means that building or portion of a building identified by the hospital as housing the main or principal source of a basic hospital service, serving the greatest number of patients, providing the greatest number of patient beds or having the largest/greatest floor space of the specified basic service. The hospital may submit data to substantiate the primary source through alternative criteria if different than above.

Principal Horizontal Directions means the two predominant orthogonal translational modes of vibration with the lowest frequency.

Slender Seismic Resisting System means any vertical system for resisting lateral forces, such as walls, braced frames, or moment frames, with a height to width ratio greater than four for the minimum horizontal dimension at any height.

Structural Performance Category (SPC) means a measure of the probable seismic performance of building structural systems and risk to life posed by a building subject to an earthquake, as defined in Article 2, Table 2.5.3 of these regulations.

SECTION 1.3 SEISMIC EVALUATION - All general acute care hospital owners shall perform a seismic evaluation on each hospital building in accordance with the Seismic Evaluation Procedures as specified in Articles 2 through 11 of these regulations. By January 1, 2001, hospital owners shall submit the results of the seismic evaluation to the Office for review and approval. By completing this seismic evaluation, a hospital facility can determine its respective seismic performance categories for both the Structural Performance Category (SPC) and the Nonstructural Performance Category (NPC) in accordance with Articles 2 and 11 of these regulations.

Section 1.3.1 Seismic Evaluation Submittal - Hospital owners shall submit the seismic evaluation report to the Office by January 1, 2001. There are no provisions for submittal of the evaluation report after this date. The hospital owners shall submit the evaluation report in accordance with Section 7-113, "Application for Plan, Report or Seismic Compliance Extension Review" and Section 7-133, "Fees" of Article 3, Chapter 7, Part 1, Title 24.

- Exceptions: 1. Any hospital facility owner whose building is exempted from the structural evaluation per Sections 2.0.1.2 shall not be required to submit a structural evaluation report as specified in Section 1.3.3. In lieu of the structural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001;
 - 2. Any hospital facility owner whose building is exempted from the nonstructural seismic evaluation per Section 11.0.1.2 shall not be required to submit a nonstructural evaluation report as specified in Section 1.3.4. In lieu of the nonstructural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001.

Section 1.3.2 Seismic Evaluation Format - The evaluation shall consist of the Structural Evaluation and the Nonstructural Evaluation Reports. The reports shall be prepared in conformance with Part 1, Chapter 7, Title 24 and these regulations and prepared as follows:

- 1. Reports shall be submitted in an 8 1/2" x 11" format;
- 2. All site, architectural, and engineering plans shall be formatted on 11" x 17" sheets (folded to 8 1/2" x 11");
- 3. Larger sheets, if required to clearly describe the requested information, shall be appended to the reports; and
- 4. Other supporting documents in addition to those meeting the minimum requirements of sections 1.3.3 and 1.3.4 may be appended to the reports.

Section 1.3.3 Structural Evaluation Report - The structural evaluation report shall include the following elements:

- 1. A description of the building, including photographs of the building, and sketches of the lateral force resisting system;
- 2. The "General Sets of Evaluation Statements" from the Appendix;
- 3. A synopsis of the investigation and supporting calculations that were made;
- 4. A list of the deficiencies requiring remediation to change statement responses from false to true; and
- 5. The SPC for the building, with comments on the relative importance of the deficiencies.

Section 1.3.4 Nonstructural Evaluation Report - The nonstructural evaluation report shall include the following elements:

- 1. A written description of the evaluation methods and procedures conducted in conformance with Article 11 of these regulations for the determination of the facilities existing compliance. The description shall include the systems and components required for the planned level of nonstructural performance as identified in Table 11.1;
 - Exceptions: 1. Additional evaluations as per Section 11.01.3 will be required for any hospital owner electing to obtain a higher NPC at a future date consistent with an approved compliance plan;
 - 2. A complete nonstructural evaluation up to NPC 5 is required prior to the hospital owner selling or leasing the hospital to another party.

- 2. Provide single line diagrammatic plans (site plan and floor plans) of the following:
 - 2.1. Location of the following areas/spaces:
 - (a) Central supply areas;
 - (b) Clinical laboratory service spaces;
 - (c) Critical care areas;
 - (d) Pharmaceutical service spaces;
 - (e) Radiological service spaces, and
 - (f) Sterile supply areas.
 - 2.2 Diagrammatic or narrative descriptions of the following major building systems where deficiencies are identified that are within the scope of the evaluation, including primary source location or point(s) of entry into the building and major distribution routes of each utility or system.
 - (a) Mechanical Systems including:
 - i. Air supply equipment, piping, controls and ducting;
 - ii. Air exhaust equipment and ducting;
 - iii. Steam and hot water piping systems, including boilers, piping systems, valving and components, and
 - iv. Elevators selected to provide service to patient, surgical, obstetrical and ground floors.
 - (b) Plumbing Systems including:
 - i. Domestic water supply system, including heating equipment, valving, storage facilities and piping;
 - ii. Medical gas supply system, including storage facilities, manifolding and piping;
 - iii. Fire protection system, including sprinkler systems, wet and dry standpipes, piping systems, and other fire suppression systems; and
 - iv. Sanitary drainage system, including storage facilities and piping.
 - (c) Electrical Systems, including:
 - i. Essential Electrical system, including emergency fuel storage;
 - ii. Internal communication systems;
 - iii. External communication systems;
 - iv. Fire alarm systems, and
 - v. Elevators selected to provide service to patient, surgical, obstetrical and ground floors
- 3. A synopsis of the evaluation and all the calculations used in the course of the evaluation for the planned level of nonstructural performance;
- 4. A list of the deficiencies identified in the course of the evaluation for the planned level of nonstructural performance;
- 5. Provide an 11x17 scaled Site Plan which identifies the boundaries of the facility property, locates all buildings, roadways, parking and other significant site features and improvements. Identify boundaries between buildings which were constructed at different times. For all buildings, note the names of the buildings and date of each related building permit. Provide the SPC and NPC for all buildings.
- 6. Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately. For buildings constructed, reconstructed or remodeled under a building permit issued by the Office, provide the OSHPD application number and the date of the initial submittal.

Building Name/ Designatio n	OSHPD (or Local Building) Permit Date/Number	Governing Building Code	Construction Completion Date	Building Type(Per Section 2.2.3)	SPC	NPC

SECTION 1.4 COMPLIANCE PLANS - A compliance plan shall be prepared and submitted for each building subject to these regulations. All general acute care hospital owners shall formulate a compliance plan which shall indicate the facilities intent to do any of the following:

- 1. Building retrofit for compliance with these regulations for continued acute care operation beyond 2030:
- 2. Partial retrofit for initial compliance, with closure or replacement expected by 2002, 2008, 2013, or 2030;
- 3. Removal from acute care service with conversion to non acute care health facility use; or
- 4. No action, building to be closed, demolished, or replaced.

This plan must clearly indicate the actions to be taken by the facility and must be in accordance with the timeframes set forth in Article 2 (Structural Performance Category – "SPC") and Article 11 (Nonstructural Performance Category – "NPC") of the Seismic Evaluation Procedure regulations.

Section 1.4.1 Preparation of the Compliance Plan - The Compliance Plan shall be prepared and submitted in conformance with these regulations in the following format:

- 1. Compliance Plans shall be submitted in an 8 1/2" x 11" format;
- 2. All site, architectural, and engineering plans shall be formatted on 11" x 17" sheets (folded to 8 1/2" x 11");
- 3. Larger sheets, if required to clearly describe the requested information, shall be appended to the compliance plan; and
- 4. Other supporting documents in addition to those meeting the minimum requirements of Section 1.4.4 may be appended to the compliance plan.

Section 1.4.2 Compliance Plan Submittal - Hospital owners shall submit the compliance plan to the Office by January 1, 2001 unless the owner requests an extension pursuant to Section 1.4.3. The hospital owners shall submit the compliance plan in accordance with Section 7-113, "Application for Plan or Report Review" and Section 7-133, "Fees" of Article 3, Chapter 7, Part 1, Title 24.

Section 1.4.3 Compliance Plan Submittal Extension - Hospital owners may request an extension from the Office for submission of the compliance plan. Any hospital owner requesting an extension for submittal of the compliance plan shall make such request in writing to the Office up to 180 days prior to, but no later than January 1, 2001. The compliance plan must be submitted no later than January 1, 2002. All hospital owners requesting an extension for submittal of the compliance plan shall certify to OSHPD that all hospital buildings continuing acute care operation beyond January 1, 2002 meet the standards of NPC 2 by January 1, 2002.

Section 1.4.4 Compliance Plan Requirements - Each compliance plan shall contain the following

elements:

- 1. An Existing Site/Campus Description;
- 2. A Compliance Plan Description;
- 3. A Compliance Site Plan;
- 4. A Compliance Plan Schedule; and
- 5. An Existing and Planned Buildings Matrix.

Section 1.4.4.1 Existing Site/Campus Description - If the compliance plan is submitted separately from the seismic evaluation, it will be necessary to resubmit the information as specified in Section 1.3.4.5, of the Nonstructural Evaluation Report.

Section 1.4.4.2 Compliance Plan Description - Provide a comprehensive narrative description of the Compliance Plan, including the projected schedule for compliance.

Section 1.4.4.3 Compliance Site Plan - Provide Compliance Site Plans, indicating the configuration of the facility at the 2008 and 2030 milestones. The plans shall indicate conforming and nonconforming buildings and identify the final configuration of the facility at each milestone, after completion of compliance measures.

Section 1.4.4.4 Compliance Plan Schedule - Provide a bar graph schedule which describes the schedule for compliance with the SPC and NPC seismic performance categories, indicating the schedule of the following major phases of the plan:

- 1. Obtain a geotechnical report (if necessary);
- 2. Architecture and engineering design/construction document preparation;
- 3. Local approvals;
- 4. Office review, approval and permitting;
- 5. Approval of Department of Health Services Licensing and Certification, and any other required licensing:
- 6. Permanent relocation of acute care services to other buildings or facilities (identify services affected):
- 7. Temporary/interim relocation of acute care services to other buildings including the duration of the approved program flexibility plan pursuant to Health and Safety Code Section 1276.05;
- 8. Construction period; and
- 9. Beneficial occupancy.

Section 1.4.4.5 Existing and Planned Buildings Matrix - Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately.

Building Name/ Designation	Building Type(Per Section 2.2.3)	SPC Existing	SPC Planned	NPC Existing	NPC Planned

Section 1.4.5 Compliance Plan Update/Change Notification - Should a hospital owner change an

approved Compliance Plan, the hospital shall document any changes and submit for review and approval to the Office an amended Compliance Plan. Changes are defined as alterations to the planned level of seismic performance or compliance schedule. Submittal of an amended compliance plan shall require a hospital owner to comply with one or more of the following provisions, if applicable:

- 1. A hospital owner shall submit to the Department of Health Services' Seismic Safety Unit (DHS) an Office-approved compliance plan that includes interim relocation of general acute care services in accordance with a program flexibility plan pursuant to Health and Safety Code Section 1276.05. This submittal by the hospital owner to DHS shall occur within 30 days of the Office's approval.
- 2. A hospital owner shall comply with the requirements of Section 1.5.2, "Delay in Compliance" for any amended compliance plan.
- 3. A hospital owner amending a compliance plan to attain a higher NPC level will perform a nonstructural evaluation of the systems and components required for the planned level of nonstructural performance identified in Table 11.1, "Nonstructural Performance Categories".

Section 1.4.5.1 Change in Seismic Performance Category - The SPC or NPC for a hospital building may be changed by the Office from the initial determination in Sections 1.3.3 or 1.3.4 provided the building has been modified to comply with the requirements of Chapter 16A, Part 2 of Title 24 for the specified SPC or NPC.

Section 1.4.5.1.1 – The SPC or NPC for a hospital building may be changed by the Office from the initial determination made per Sections 2.0.1.2.3 or 11.0.1.2.1 upon the following:

- 1. A seismic evaluation report shall be submitted and approved which shall include either or both of the following:
 - 1.1 A structural evaluation report in accordance with Section 1.3.3;
 - 1.2 A nonstructural evaluation report in accordance with Section 1.3.4. Exception: To change an NPC 1 hospital building to an NPC 2 under this section, the nonstructural evaluation may be limited in scope to the systems and equipment specified in Section 11.2.1.
- 2. The building has been modified to comply with the requirements of Chapter 16B, Part 2 of Title 24 for the specified SPC or NPC.

Section 1.4.5.1.2 - A nonconforming hospital building from which all acute care services have been removed shall no longer be classified as a hospital building. A nonconforming hospital building used only for nonacute hospital purposes shall be classified as an outpatient clinical hospital service building and shall comply with the provisions of Health and Safety Code Section 129725, or shall be classified as a distinct part skilled nursing facility. The provisions of Health and Safety Code Section 129885(f) shall not apply to buildings used for nonacute hospital purposes.

Section 1.4.5.1.3 – A hospital building that has been removed from acute care service may not be relicensed as an acute care hospital building unless it has been modified to comply with the requirements of SPC 5 and NPC 4 or 5. Prior to use for acute care service, the SPC and/or NPC of the hospital building shall be changed in accordance with Section 1.4.5.1.1.

SECTION 1.5 COMPLIANCE REQUIREMENTS - All general acute care hospital owners shall comply with the seismic performance categories, both SPCs and NPCs, established in the seismic evaluation procedures, Articles 2 and 11 and set forth in Tables 2.5.3 and 11.1 respectively.

Section 1.5.1 – Compliance Deadlines

- 1. After January 1, 2002, any general acute care hospital building which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 2 as defined in Article 11, Table 11.1 or shall no longer provide acute care services.
- 2. After January 1, 2008, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 2 as defined in Article 2, Table 2.5.3 or shall no longer provide acute care services.

Exception: A general acute care hospital may request a delay of SPC 2 requirements if the conditions of Section 1.5.2 are met.

3. After January 1, 2008, any general acute care hospital which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 3 as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

Exception: A general acute care hospital may request an exemption from the anchorage and bracing requirements of NPC 3 if all the conditions of Section 1.5.2, Item 2, are met.

4. January 1, 2030, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 3, 4, or 5 as in Article 2, Table 2.5.3 and the nonstructural requirements of NPC 5 as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

Section 1.5.2 Delay in Compliance

- 1. The Office may grant the hospital owner an extension to the January 1, 2008 seismic compliance deadline for both structural and nonstructural requirements if compliance will result in diminished health care capacity which cannot be provided by other general acute care hospitals within a reasonable proximity.
 - 1.1 Hospital owners requesting an extension in accordance with Section 1.5.2_must submit an application form to the Office by January 1, 2007. The application form shall be accompanied by a statement explaining why the hospital is seeking the extension to the January 1, 2008 seismic compliance deadline. The statement shall include, at a minimum, the following information:
 - (a) The length/duration of the extension request;
 - (b) The hospital buildings requiring an extension; and
 - (c) The acute care services that will be completely or partially unavailable if the extension is denied.
 - 1.2. The hospital owner shall request an extension for seismic compliance in one-year increments, up to a maximum of five (5) years, beyond the mandated year of compliance. The hospital owner shall also submit an amended compliance plan and schedule in accordance with Section_1.4.5 indicating when compliance will be obtained.
- 2. Any general acute care hospital located in Seismic Zone 3, as defined by Section 1627A.2 of the 1995 edition of the California Building Standards Code, may request an exemption from the anchorage and bracing requirements of NPC 3 if all of the following conditions are met:
 - 2.1 The hospital must meet the anchorage and bracing requirements for NPC 2 by January 1, 2002;
 - 2.2 The hospital shall submit a site-specific engineering geologic report, prepared in accordance with Section 1634B.1. The report shall include estimates of the effective peak ground acceleration (EPA) with a 10% probability of exceedance in 50 years;
 - 2.3 The California Division of Mines and Geology (CDMG) reviews and approves the findings of the site-specific engineering geologic report;

2.4 The site-specific engineering geologic report demonstrates that the estimated EPA with a 10% probability of exceedance in 50 years is less than 0.25 g;

- 2.5 The hospital owner requesting the exemption shall pay the actual costs of OSHPD and CDMG for the review and approval of the site-specific engineering geologic report.
- 3. Any SPC-1 building which is part of the functional contiguous grouping of a general acute care hospital may receive a five-year extension to the January 1, 2008 deadline for both structural and nonstructural requirements under the following conditions:
 - 3.1 The owner must apply for an extension with the Office no later than January 1, 2004;
 - 3.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;
 - 3.3 The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002;
 - 3.4 At least one building within the contiguous grouping shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;

Exception: Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.

- 3.5 The basic service(s) from this building shall be:
 - (a) Relocated to an SPC-3, 4, or 5/NPC-4 or 5 building by January 1, 2013.
 - i. The building shall not be used for general acute care service after January 1, 2013 unless it has been retrofit to an SPC-5/NPC 4 or 5 building; or
 - (b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013:
- 3.6. Any other SPC-1 building in the contiguous grouping other than the building identified in subsection 1.5.2.3.4 must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013 or no longer used for acute care hospital inpatient services.
- 4. A post 1973 building classified as SPC-3 or 4 may receive an extension to the January 1, 2008 deadline for both the structural and nonstructural requirements provided it will be closed to general acute care inpatient service by January 1, 2013. The basic services in this building shall be relocated to an SPC-5/NPC-4 or 5 building by January 1, 2013;
 - 4.1 Any SPC-1 building in a functional contiguous grouping must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013 or no longer used for acute care hospital inpatient services. The following conditions apply to these hospital buildings:
 - (a) The owner must apply for an extension with the Office no later than January 1, 2004;
 - (b) The owner must submit an amended compliance plan to the Office by July 1, 2004; and
 - (c) The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002.
- 5. A single building containing all of the basic services may receive a five-year extension to the January 1, 2008 deadline for both structural and nonstructural requirements under the following conditions:
 - 5.1 The owner must apply for an extension with the Office no later than January 1, 2004;
 - 5.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;
 - 5.3 The building shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;

Exception: Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.

- 5.4 The basic services from this building shall be:
 - (a) Relocated to an SPC-3, 4 or 5/NPC-4 or 5 building by January 1, 2013.
 - i. The building shall not be used for general acute care service after January 1, 2013

unless it has been retrofitted to an SPC-5/NPC-4 or 5 building; or

(b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013.

SECTION 1.6 DISPUTE RESOLUTION/APPEALS PROCESS - Dispute resolution and appeals shall be in conformance with Article 5, Chapter 7, Part 1 of Title 24.

SECTION 1.7 NOTIFICATION FROM OSHPD

- 1. The Office shall issue written notices of compliance to all hospital owners that have attained the minimum required SPC and NPC performance levels by January 1, 2008, January 1, 2013 and January 1, 2030;
- 2. The Office shall issue written notices of violation to all hospital owners that are not in compliance with the minimum SPC and NPC performance levels by January 1, 2008, January 1, 2013 and January 1, 2030; and
- 3. The Office shall notify the State Department of Health Services of the hospital owners which have received a written notice of violation for failure to comply with these regulations.